Notice to Comply	Application No.	Applicant(s)
	09/659,983	MELOEN ET AL.
	Examiner	Art Unit	
	Regina M. DeBerry	1647	

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).

☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).

☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).

☒ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."

☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).

☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable from of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).

☐ 7. Other:

Applicant Must Provide:
☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".

☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.

☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216
For CRF Submission Help, call (703) 308-4212
PatentIn Software Program Support
    Technical Assistance..703-287-0200
    To Purchase PatentIn Software........................703-306-2600

PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY

● ●● Raw Sequence Listing Error Summary

SERIAL NUMBER: _09/659,983A_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 _____ Wrapped Nucleics

The number/text at the end of each line "wrapped" down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

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MAY 1 7 2001

TECH CENTER 1600/2900

2 _____ Wrapped Aminos

The amino acid number/text at the end of each line "wrapped " down to the next line.
This may occur if your file was retrieved in a word processor after creating it.
Please adjust your right margin to .3, as this will prevent "wrapping".

3 _____ Incorrect Line Length

The rules require that a line not exceed 72 characters in length. This includes spaces.

4 _____ Misaligned Amino Acid Numbering

The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs
between the numbering. It is recommended to delete any tabs and use spacing between the numbers.

5 _____ Non-ASCII

This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.

6 _____ Variable Length

Sequence(s) _3_ contain _amino acids_ ; which represented more than one residue.

Please present the maximum number of each residue having variable length and
indicate in the (x) feature section that some may be missing.

<2207-<2223>

7 _____ PatentIn ver. 2.0 "bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
sequence(s) _____. Normally, PatentIn would automatically generate this section from the
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section
to the subsequent amino acid sequence. **This applies primarily to the mandatory <220>-<223>
sections for Artificial or Unknown sequences.**

8 _____ Skipped Sequences (OLD RULES)

Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X:
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:
This sequence is intentionally skipped

Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).

9 _____ Skipped Sequences (NEW RULES)

Sequence(s) _____ missing. If intentional, please use the following format for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

10 _____ Use of n's or Xaa's (NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

11 _____ Use of "Artificial" (NEW RULES)

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules.
Valid response is Artificial Sequence.

12 _____ Use of <220>Feature (NEW RULES)

Sequence(s) _____ are missing the <220>Feature and associated headings.
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial Sequence" or "Unknown"
Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of new Rules)

13 _____ PatentIn ver. 2.0 "bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted
file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).
Instead, please use "File Manager" or any other means to copy file to floppy disk.

1647

RAW SEQUENCE LISTING   DATE: 05/03/2001
PATENT APPLICATION: US/09/659,983A   TIME: 12:50:25

Input Set : A:\PTO.txt
Output Set: N:\CRF3\05032001\I659983A.raw

```
 3 <110> APPLICANT: Meloen, Robert Hans
 4        Oonk, Hendrica Berendina
 6 <120> TITLE OF INVENTION: An Improved Peptide, Immunogenic Composition and Vaccine or Medical
 7        Preparation, a Method to Immunise Animals Against the Hormone LHRH, and Analogs
 8        of the LHRH Tandem Repeat Peptide and their Use as Vaccine
10 <130> FILE REFERENCE: 2183-4518US
12 <140> CURRENT APPLICATION NUMBER: 09/659,983A
13 <141> CURRENT FILING DATE: 2000-09-12
15 <150> PRIOR APPLICATION NUMBER: US 09/274,048
16 <151> PRIOR FILING DATE: 1999-03-22
18 <150> PRIOR APPLICATION NUMBER: US 08/981,557
19 <151> PRIOR FILING DATE: 1995-06-07
21 <150> PRIOR APPLICATION NUMBER: PCT/NL96/00223
22 <151> PRIOR FILING DATE: 1996-06-06
24 <150> PRIOR APPLICATION NUMBER: US 08/447,298
25 <151> PRIOR FILING DATE: 1995-06-07
27 <150> PRIOR APPLICATION NUMBER: US 08/476,013
28 <151> PRIOR FILING DATE: 1995-06-07
30 <160> NUMBER OF SEQ ID NOS: 13
32 <170> SOFTWARE: PatentIn version 3.0
34 <210> SEQ ID NO: 1
35 <211> LENGTH: 10
36 <212> TYPE: PRT
37 <213> ORGANISM: Sus scrofa
39 <220> FEATURE:
40 <221> NAME/KEY: PEPTIDE
41 <222> LOCATION: (1)..(1)
42 <223> OTHER INFORMATION: X=pyroglutamic acid
45 <220> FEATURE:
46 <221> NAME/KEY: PEPTIDE
47 <222> LOCATION: (10)..(10)
48 <223> OTHER INFORMATION: X=Gly-NH2
51 <400> SEQUENCE: 1
53 Xaa His Trp Ser Tyr Gly Leu Arg Pro Xaa
54 1               5                   10
56 <210> SEQ ID NO: 2
57 <211> LENGTH: 10
58 <212> TYPE: PRT
59 <213> ORGANISM: Homo sapiens
61 <220> FEATURE:
62 <221> NAME/KEY: PEPTIDE
63 <222> LOCATION: (1)..(1)
64 <223> OTHER INFORMATION: X=pyroglutamic acid
67 <220> FEATURE:
68 <221> NAME/KEY: PEPTIDE
69 <222> LOCATION: (10)..(10)
70 <223> OTHER INFORMATION: X=Gly-NH2
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```
          RAW SEQUENCE LISTING           DATE: 05/03/2001
          PATENT APPLICATION:  US/09/659,983A      TIME: 12:50:25

          Input Set : A:\PTO.txt
          Output Set: N:\CRF3\05032001\I659983A.raw
```

```
    73  <400> SEQUENCE: 2
    75  Xaa His Trp Ser His Gly Trp Tyr Pro Xaa
    76  1               5                  10
    78  <210> SEQ ID NO: 3
    79  <211> LENGTH: 21
    80  <212> TYPE: PRT
C-->81  <213> ORGANISM: artificial
    83  <220> FEATURE:
    84  <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
    85        GnRH/ LHRH
    87  <220> FEATURE:
    88  <221> NAME/KEY: PEPTIDE
    89  <222> LOCATION: (1)..(1)
    90  <223> OTHER INFORMATION: X=pyroglutamic acid or Gln with attached tail of one or more addi
    91        tional amino acid
    94  <220> FEATURE:
    95  <221> NAME/KEY: PEPTIDE
    96  <222> LOCATION: (3)..(3)
    97  <223> OTHER INFORMATION: X=Trp or N(indole)formyl-tryptophan
   100  <220> FEATURE:
   101  <221> NAME/KEY: PEPTIDE
   102  <222> LOCATION: (11)..(11)
   103  <223> OTHER INFORMATION: X=direct bond or a spacer group between Gly at position 10 and Gl
   104        n at position 1
   107  <220> FEATURE:
   108  <221> NAME/KEY: PEPTIDE
   109  <222> LOCATION: (14)..(14)
   110  <223> OTHER INFORMATION: X=Trp or N(indole)formyl-tryptophan
   113  <220> FEATURE:
   114  <221> NAME/KEY: PEPTIDE
   115  <222> LOCATION: (21)..(21)
   116  <223> OTHER INFORMATION: X=Gly-NH2 or Gly with attached tail of one or more amino acids
   119  <220> FEATURE:
   120  <221> NAME/KEY: VARIANT
   121  <222> LOCATION: (10)..(20)
   122  <223> OTHER INFORMATION: variable repeat sequence <>10-20
   125  <400> SEQUENCE: 3
W-->127  Xaa His Xaa Ser Tyr Gly Leu Arg Pro Gly Xaa Gln His Xaa Ser Tyr
   128  1               5                  10                15
W-->130  Gly Leu Arg Pro Xaa
   131                  20
   133  <210> SEQ ID NO: 4
   134  <211> LENGTH: 21
   135  <212> TYPE: PRT
C-->136  <213> ORGANISM: artificial
   138  <220> FEATURE:
   139  <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
   140        GnRH/ LHRH
   142  <220> FEATURE:
```

Handwritten annotations:
see item 11 on Error Summary Sheet

Xaa can only represent a single amino acid, nothing else

see item 6 on Error Summary Sheet

item 11

```
143 <221> NAME/KEY: PEPTIDE
144 <222> LOCATION: (1)..(1)
145 <223> OTHER INFORMATION: X=pyroglutamic acid
148 <220> FEATURE:
149 <221> NAME/KEY: PEPTIDE
150 <222> LOCATION: (6)..(6)
151 <223> OTHER INFORMATION: X=D-Lys
154 <220> FEATURE:
155 <221> NAME/KEY: PEPTIDE
156 <222> LOCATION: (11)..(11)
157 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
160 <220> FEATURE:
161 <221> NAME/KEY: PEPTIDE
162 <222> LOCATION: (16)..(16)
163 <223> OTHER INFORMATION: X=D-Lys
166 <220> FEATURE:
167 <221> NAME/KEY: PEPTIDE
168 <222> LOCATION: (21)..(21)
169 <223> OTHER INFORMATION: X=Cys-NH2
172 <400> SEQUENCE: 4
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W--> 174 Xaa His Thr Ser Tyr Xaa Leu Arg Pro Gly Xaa His Thr Ser Tyr Xaa
```
175 1               5                   10                  15
```
W--> 177 Leu Arg Pro Gly Xaa
```
178                 20
180 <210> SEQ ID NO: 5
181 <211> LENGTH: 21
182 <212> TYPE: PRT
```
C--> 183 <213> ORGANISM: artificial
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185 <220> FEATURE:
186 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
187       GnRH/ LHRH
189 <220> FEATURE:
190 <221> NAME/KEY: PEPTIDE
191 <222> LOCATION: (1)..(1)
192 <223> OTHER INFORMATION: X=pyroglutamic acid
195 <220> FEATURE:
196 <221> NAME/KEY: PEPTIDE
197 <222> LOCATION: (4)..(4)
198 <223> OTHER INFORMATION: X=amino acid substitution
201 <220> FEATURE:
202 <221> NAME/KEY: PEPTIDE
203 <222> LOCATION: (6)..(6)
204 <223> OTHER INFORMATION: X=D-Lys
207 <220> FEATURE:
208 <221> NAME/KEY: PEPTIDE
209 <222> LOCATION: (11)..(11)
210 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
213 <220> FEATURE:
214 <221> NAME/KEY: PEPTIDE
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          215  <222> LOCATION: (14)..(14)
          216  <223> OTHER INFORMATION: X=amino acid substitution
          219  <220> FEATURE:
          220  <221> NAME/KEY: PEPTIDE
          221  <222> LOCATION: (16)..(16)
          222  <223> OTHER INFORMATION: X=D-Lys
          225  <220> FEATURE:
          226  <221> NAME/KEY: PEPTIDE
          227  <222> LOCATION: (21)..(21)
          228  <223> OTHER INFORMATION: X=Cys-NH2
          231  <400> SEQUENCE: 5
W-->      233  Xaa His Thr Xaa Tyr Xaa Leu Ala Pro Gly Xaa His Thr Xaa Tyr Xaa
          234  1               5                   10              15
W-->      236  Leu Arg Pro Gly Xaa
          237                  20
          239  <210> SEQ ID NO: 6
          240  <211> LENGTH: 21
          241  <212> TYPE: PRT
C-->      242  <213> ORGANISM: artificial
          244  <220> FEATURE:
          245  <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
          246        GnRH/ LHRH
          248  <220> FEATURE:
          249  <221> NAME/KEY: PEPTIDE
          250  <222> LOCATION: (1)..(1)
          251  <223> OTHER INFORMATION: X=pyroglutamic acid
          254  <220> FEATURE:
          255  <221> NAME/KEY: PEPTIDE
          256  <222> LOCATION: (6)..(6)
          257  <223> OTHER INFORMATION: X=D-Lys
          260  <220> FEATURE:
          261  <221> NAME/KEY: PEPTIDE
          262  <222> LOCATION: (8)..(8)
          263  <223> OTHER INFORMATION: X=amino acid substitution
          266  <220> FEATURE:
          267  <221> NAME/KEY: PEPTIDE
          268  <222> LOCATION: (11)..(11)
          269  <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
          272  <220> FEATURE:
          273  <221> NAME/KEY: PEPTIDE
          274  <222> LOCATION: (16)..(16)
          275  <223> OTHER INFORMATION: X=D-Lys
          278  <220> FEATURE:
          279  <221> NAME/KEY: PEPTIDE
          280  <222> LOCATION: (18)..(18)
          281  <223> OTHER INFORMATION: X=amino acid substution
          284  <220> FEATURE:
          285  <221> NAME/KEY: PEPTIDE
          286  <222> LOCATION: (21)..(21)
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RAW SEQUENCE LISTING   DATE: 05/03/2001
PATENT APPLICATION: US/09/659,983A   TIME: 12:50:25

Input Set : A:\PTO.txt
Output Set: N:\CRF3\05032001\I659983A.raw

```
      287 <223> OTHER INFORMATION: X=Cys-NH2
      290 <400> SEQUENCE: 6
W--> 292 Xaa His Thr Ser Tyr Xaa Leu Xaa Pro Gly Xaa His Thr Ser Tyr Xaa
      293 1           5                 10              15
W--> 295 Leu Xaa Pro Gly Xaa
      296          20
      298 <210> SEQ ID NO: 7
      299 <211> LENGTH: 21
      300 <212> TYPE: PRT
C--> 301 <213> ORGANISM: artificial
      303 <220> FEATURE:
      304 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
      305      GnRH/ LHRH
      307 <220> FEATURE:
      308 <221> NAME/KEY: PEPTIDE
      309 <222> LOCATION: (1)..(1)
      310 <223> OTHER INFORMATION: X=pyroglutamic acid
      313 <220> FEATURE:
      314 <221> NAME/KEY: PEPTIDE
      315 <222> LOCATION: (6)..(6)
      316 <223> OTHER INFORMATION: X=D-Lys
      319 <220> FEATURE:
      320 <221> NAME/KEY: PEPTIDE
      321 <222> LOCATION: (10)..(10)
      322 <223> OTHER INFORMATION: X=amino acid substutition
      325 <220> FEATURE:
      326 <221> NAME/KEY: PEPTIDE
      327 <222> LOCATION: (11)..(11)
      328 <223> OTHER INFORMATION: X=Gly or Gly preceded by a spacer
      331 <220> FEATURE:
      332 <221> NAME/KEY: PEPTIDE
      333 <222> LOCATION: (20)..(20)
      334 <223> OTHER INFORMATION: X=amino acid substitution
      337 <220> FEATURE:
      338 <221> NAME/KEY: PEPTIDE
      339 <222> LOCATION: (21)..(21)
      340 <223> OTHER INFORMATION: X=Cys-NH2
      343 <400> SEQUENCE: 7
W--> 345 Xaa His Thr Ser Tyr Xaa Leu Arg Pro Xaa Xaa His Thr Ser Tyr Xaa
      346 1           5                 10              15
W--> 348 Leu Arg Pro Xaa Xaa
      349          20
      351 <210> SEQ ID NO: 8
      352 <211> LENGTH: 42
      353 <212> TYPE: PRT
C--> 354 <213> ORGANISM: artificial
      356 <220> FEATURE:
      357 <223> OTHER INFORMATION: A peptide suitable for eliciting an immune response against forms
      358      GnRH/ LHRH
```

(handwritten note:) what about Xaa at location 16?

The types of errors shown exist <u>throughout</u> the Sequence Listing. Please check subsequent sequences for similar errors.

<u>Please Note:</u>
Use of n and/or Xaa have been detected in th Sequence Listing. Please review the Sequence Listing to ensure that a corresp nding explanation is presented in the <220> to <223> fields of each sequenc which presents at least one n or Xaa.

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/659,983A

DATE: 05/03/2001
TIME: 12:50:26

Input Set : A:\PTO.txt
Output Set: N:\CRF3\05032001\I659983A.raw

```
L:53  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:75  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:81  M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:136 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:177 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:183 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:242 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:292 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:301 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:345 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:348 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:354 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:416 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:419 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:428 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:466 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:475 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:513 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:516 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:522 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:572 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:575 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:581 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:631 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:634 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:640 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:684 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:687 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
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